REMARKS

In response to the Office Action of May 4, 2006, the Applicants submit this Reply.

Claims 1, 9 and 23 remain in this application, all of which claims are independent. In the Office Action, claims 1, 9 and 23 were rejected. In view of the following remarks, reconsideration is requested.

The prior Office Action (July 28, 2005) in this application included a rejection based upon the judicially created doctrine of non-statutory double patenting over co-pending application serial no. 10/897,506. This rejection was not repeated in the instant Office Action, and, accordingly, Applicants understand that this rejection has been withdrawn.

Overview of Reply

(A) The three rejections of the Office Action attempt to combine different prior art in different ways in order to achieve the claimed invention. As noted below, however, none of the prior art teaches or suggests that a camera should be in the same portable housing as an editing system or other means that enables an individual to specify or define sequences of segments of sequences of digital still images stored on the digital computer-readable and writable random-access medium.

In particular, none of the references (namely, Peters[1], Bluth[2] and Schultheiss[3]) relied upon in the Office Action to describe a mechanism for specifying sequences of segments of stored video material teach or suggest that a camera should be combined with such mechanisms in a portable housing. Notably, all of these references mention the capability of recording video from a camera, yet do not suggest combining the editing and recording in the same portable housing.

Furthermore, in all of the references cited in the Office Action that describe cameras in some detail (namely, Kojima[4], Washino I[5], Washino II[6], and Bluth), none of them teach or suggest that a camera should include within its housing a mechanism for enabling a user to define or specify sequences of segments of *stored* video material.

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[1] U.S. Patent No. 5,946,445 to Peters, *et al.*
[2] U.S. Patent No. 3,617,626 to Bluth, *et al.*
[3] U.S. Patent No. 5,465,120 to John C. Schultheiss
[4] U.S. Patent No. 5,168,363 to Kojima, *et al.*
[5] U.S. Patent No. 5,537,157 to Washino, *et al.*
[6] U.S. Patent No. 5,488,433 to Washino, *et al.*

(B) Also, the three rejections are formulated in a way that does not guard against the use of impermissible hindsight reconstruction. Two requirements are designed to protect against the use of hindsight. First, obviousness rejections "must be based on objective evidence of record."[7] Second, the prior art references when combined must teach or suggest all the claim limitations. See MPEP 2143 (emphasis added).

Applicants reiterate that the reasons for the proposed rejection combinations lack citations to any evidence supporting the combination.[8] The assertions are nothing more than generalized statements of advantage, without regard to either the desirability or the feasibility of modifying the prior art and without any supporting citations to any authority. That is, the Office Action does not establish in the record any evidence – either from the references cited, or other evidence or even Official Notice – from which one can conclude that "a skilled artisan, *with no knowledge of the claimed invention* [emphasis added], would have selected . . . components [from these references] for combination in the manner claimed."[9] Specific examples of such statements of advantage are provided in the discussion of the respective rejections.

Because such assertions about advantages and convenience are made without any reference to any evidence to support them, it has not been demonstrated that these advantages and conveniences were apparent to those of ordinary skill in the art at the time the invention was made. As noted by the Federal Circuit, "this factual question of motivation is material to patentability, and [cannot] be resolved on subjective belief and unknown authority."[10]

In the absence of appropriate evidence in the record, a requirement designed to avoid the "subtle but powerful attraction of a hindsight-based obviousness analysis"[11], a *prima facie* case of obviousness has not been established.

In all of the rejections, each primary reference was first characterized by comparing it to the claim language. In turn, the proposed combinations of references are described as

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[7] *In re Lee*, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).
[8] The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination. *Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986). There must be some objective teaching in the prior art, or in the knowledge of the field, that would lead one of ordinary skill to combine the teachings of the references to achieve the combined invention. *Ex parte Levengood*, 28 U.S.P.Q.2d (BNA) 1300, 1993 WL 418326 (Bd. Pat. App. & Interferences 2003).
[9] *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).
[10] *In re Lee*, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).
[11] *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999).

combinations of claimed elements, not as combinations of the teachings of references. Thus, instead of making "particular findings . . . as to the reason the skilled artisan, *with no knowledge of the claimed invention* [emphasis added], would have selected . . . components for combination in the manner claimed,"[12] the entire analysis of the collective teachings of the references is wrapped up in the claim language. Thus, the rejections are improper to the extent that factual findings regarding the collective teachings of the cited references rely on the claim language instead of the prior art. Furthermore, in none of the rejections is the current claim language of any of claims 1, 9 or 23 accurately reproduced in the Action's rejections, resulting in omission from the Action's discussion of the limitations of claim terms such as, for example, *motion picture editing system within the housing, stored in random access memory*, and video camera *mounted in the housing.*

For these reasons, and for the reasons below, the rejections in this Office Action are traversed.

Summary of Invention

The present invention relates to a digital motion picture recorder.[13] The recorder includes a housing sized to be portable by an individual.[14] A motion picture camera is mounted in the housing.[15] A sequence of digital still images is produced from the motion picture camera.[16] A digital, computer-readable and writable random-access medium (such as disk drives 120[17]) is mounted in the housing and is connected to receive and store the sequence of digital still images in a computer-readable file format.[18]

A motion picture editing system also is mounted in the camera.[19] Such an editing system defines a sequence of segments of the sequences of digital still images that are stored in the data files.[20] At least a portion of the sequence of digital still images and read and output from the digital computer-readable and writable random-access medium according to the defined

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[12] *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).
[13] Page 3, line 5 and Fig. 1 (20).
[14] Page 3, line 6.
[15] Page 3, lines 6-7.
[16] Page 3, lines 7-9.
[17] See Figs. 7-9 and page 6, lines 18-26.
[18] Page 3, lines 9-11, page 9, lines 3-6.
[19] Page 3, lines 14-15. See also page 11, lines 28-31.
[20] See U.S. Patent 5,267,351 and PCT Publication WO93/21636, incorporated by reference at page 11, line 30.

sequence of segments.[21] A display and editing controls on the housing allow a user to provide input to the editing system.[22]

The inclusion of an editing system within the housing of a camera that records video information in data files on a digital, computer-readable and writable random-access medium "allows the user of the present invention to edit the video material recorded at the recording site, even prior to, or in lieu of, editing in a studio. This is particularly advantageous if the material must be broadcast immediately. Therefore, the video and audio signals may be recorded, edited and broadcast from the field in a very short period of time."[23]

Rejection Under 35 U.S.C. §103 in view of Peters and Kojima

The rejection of claims 1, 9 and 23 under 35 U.S.C. §103 in view of Peters and Kojima was repeated in the instant Office Action. The rejection is respectfully traversed.

According to Peters, a system stores audio and/or video material digitally such that it can be randomly and immediately accessed.[24] In Fig. 1 of Peters, "analog video sources 1 and analog audio sources 2 are received by video coprocessor 3 and audio coprocessor 4."[25] "Each of the coprocessors digitizes incoming material and stores it on storage devices 5."[26] Such storage is "typically on a magnetic disk or in a computer memory."[27] Separate files are created in response to a discontinuity in the video information received. Fig. 1 illustrates that sources of analog video received by the media recorder include such things as a video tape recorder, a video camera or a video assist of a film camera.[28] "The storage of clips on disk . . . allows multiple clips to be played back in sequence."[29] The computer and video system in Fig. 1 can be designed for portability.[30] In summary, Peters teaches a portable computer system that receives a video signal and stores video information in data files on a digital random-access computer readable and rewriteable recording medium.

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[21] Page 12, lines 3-7.
[22] Page 3, lines 15-16, page 12, lines 8-12 and Fig. 1, elements 30 and 64.
[23] Page 11, line 31 to page 12, line 3.
[24] Peters, col. 2, lines 17-21.
[25] Peters, col. 2, lines 30-32.
[26] Peters, col. 2, lines 35-36.
[27] Peters, col. 2, lines 18-19.
[28] See Fig. 1.
[29] Peters, col. 3, lines 32-34.
[30] Peters, col. 3, lines 43-45.

The Action asserts that Peters teaches "a means for specifying a sequence of still images". The claims, however, actually recite (using claim 1 as an example): "enabling the individual to specify a sequence of segments of the sequence of digital still images stored on the digital, computer-readable and writable random-access medium." Thus, the assertion that Peters teaches a "means for specifying a sequence of still images" has nothing to do with the actual claim language.

The Action acknowledges that Peters "fails to specifically teach that the motion camera mounted in the housing having the recorder. [sic]"[31] It is probably more accurately stated that Peters teaches that a camera is separate from Peters' computer system that receives a video signal from that camera. The Action also fails to address the claim limitation of "enabling the individual to specify a sequence of segments of the sequence of digital still images stored on the digital, computer-readable and writable random-access medium," as noted above. Peters also fails to teach that a "motion picture camera" is mounted in the same "housing sized to be portable for use by an individual" that also includes both a "digital, computer-readable and writable random-access medium" and an "editing system" for "enabling the individual to specify a sequence of segments of the sequence of digital still images stored on the digital, computer-readable and writable random-access medium."

Kojima relates to a "video signal processing apparatus for use with a video tape recorder (VTR) with a built in camera."[32] (emphasis added.)

The Action asserts that Kojima teaches "combining a camera with a recorder for making a portable apparatus is well known"[33] and "is used by applicant and it is not the examiner belief [sic]"[34] This assertion impermissibly generalizes the teachings of Kojima and the Applicants' specification. Kojima teaches nothing more than the fact that it is common to have a video tape recorder (VTR) with a built in camera, as discussed in the Background portion of the Applicants' specification[35]. Applicants indicate that the phrase "is used by applicant" appears, again, to suggest that the examiner is using impermissible hindsight in finding obviousness only after reading applicants' application.

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[31] Office Action, page 4, lines 1-3.
[32] Kojima, Fig. 1, and col. 1, lines 10-11.
[33] Office Action, Page 4, lines 3-5.
[34] Office Action, page 4, ll. 12-13.
[35] Specification, page 1, ll. 13-14.

The Action asserts that it would have been obvious to combine the teachings of Peters and Kojima, by "providing a motion camera in the same housing of the digital recorder for portability's purpose therefore providing more advantages to the user in handling the apparatus for capturing the pictures when needed."[36] Applicant respectfully disagrees.

As noted above, the Office Action *does not set forth sufficient evidence* to support a prima facie case for combining of the teachings of Peters and Kojima.

For example, Kojima merely refers to a video tape recorder with a built in camera. The Action impermissibly generalizes the teachings of Kojima by extending it to all "recorders". There is no evidence in the record to support that one of ordinary skill in the art would have recognized such a generalized teaching in Kojima, or that such a teaching should be applied to computer systems that store data on a magnetic disk or in computer memory such as in Peters.

As another example, there is no evidence that one of ordinary skill in the art would have found it either desirable or feasible to replace the video tape recording functions in Kojima with the portable computer system described in Peters; or that one of ordinary skill in the art would have found it either desirable or feasible to combine a camera in the same housing as the portable computer system described in Peters. In particular, Peters teaches a computer that receives a video signal and stores video information in data files on a digital random-access computer readable and rewriteable recording medium, such as magnetic disk. Although Peters mentions receiving a signal from a camera, Peters does not teach or even suggest that the camera should be included as part of that portable computer system. Kojima merely teaches a camera combined with a video tape recorder, not a computer system. Thus, neither reference teaches combining a camera with a portable computer system such as shown in Peters.

The Office Action asserts that such a combination would have been made to provide more advantages to the user in handling the apparatus for capturing the pictures when needed." Such an assertion is nothing more than a generalized statement of advantage, without regard to either the desirability or the feasibility of modifying the prior art and without any supporting citations to any authority. Because the assertion is made without any reference to any evidence to support it, it has not been demonstrated that these advantages and conveniences would have been apparent to those of ordinary skill in the art at the time the invention was made. Contrary to

[36] Office Action, page 4, lines 2-4

the Action's statement, such assertions are thus nothing more than the Examiner's subjective belief, and are not evidence. As noted by the Federal Circuit, "this factual question of motivation is material to patentability, and [cannot] be resolved on subjective belief and unknown authority."[37]

Accordingly the rejection is traversed because the proposed combination is not supported by evidence of record.

The rejection also is traversed because some claims limitations were not addressed with respect to the proposed combination. As noted above, the Action asserts that Peters teaches "specifying a sequence of still images." The Action fails to address the claim language, which is (citing claim 1): "enabling the individual to specify a sequence of segments of the sequence of digital still images stored on the digital, computer-readable and writable random-access medium."

Accordingly, this rejection of claims 1, 9 and 23 is traversed.

As discussed above, it is also noted that the Action explains this rejection by first characterizing each reference by comparing it to the claim language, which is sometimes misquoted. For example, consider that the Action asserts that Peters teaches "a means for specifying a sequence of still images", instead of quoting the teachings of Peters directly. In turn, the proposed combinations of references are described as combinations of claim elements, not as combinations of the teachings of references. Thus, the rejections are improper to the extent that factual findings regarding the collective teachings of the cited references rely on the claim language, sometimes misquoted, instead of evidence from the prior art.

Because the record lacks evidence required to support the findings of fact on which the rejection is based, it cannot be held that the references relied upon by the Action would have suggested to one of ordinary skill in the art at the time the invention was made "*a housing sized to be portable for use by an individual; a motion picture camera mounted in the housing. . .; . . .a digital, computer-readable and writable random-access medium mounted in the housing and connected to receive and store the sequence of digital still images in a computer-readable file format*," and a system "*within the housing for specifying [or defining] a sequence of segments of*

[37] *In re Lee*, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

the sequence of digital still images stored on the digital, computer-readable and writable random-access medium," as claimed in the independent claims 1, 9 and 23.

Rejection Under 35 U.S.C. §103 in view of Bluth and Washino I

The rejection of claims 1, 9 and 23 under 35 U.S.C. §103 in view of Bluth and Washino-I was repeated in the instant Office Action. The rejection is respectfully traversed.

This rejection is improper and should be withdrawn because neither Bluth nor Washino I, nor their combined teachings, teaches or suggests the limitations of the independent claims. In particular, neither reference (alone or in combination) teaches or suggests any function, *within a portable housing*, for *enabling an individual to specify sequences of segments of stored* video.

In particular, the Action asserts[38] that Bluth teaches a "housing sized to be portable for use by an individual," referring to Fig. 1 of Bluth. No such housing is shown in Fig. 1 of Bluth. Instead, Fig. 1 is referred to as a "system" throughout Bluth. There is nothing in Bluth that teaches or suggests that all of the components of this system, particularly editing, are found in a portable housing.

In the Action, the Examiner disagreed and asserted that "the electronic recorder of [sic] Bluth teaches is a portable since all the circuits of the camera and recorder are connected together and can be used with [sic] an individual. Further the recorder of Bluth inherently having [sic] a housing to contain the circuits of the recorder."[39] There is no evidence from Bluth to support this assertion. There is no discussion of housings or proximity of circuits in Bluth. Further, it is more than plausible that each element in Fig. 1 of Bluth would have its own "housing" to cover and contain its own electronic circuits, so nothing in the architecture of Bluth's system would suggest that all of the components in Fig. 1 must be in a single *portable housing*.

Washino I states that *editing* functions are performed in a personal computer. In particular, Washino I states "[i]n the preferred embodiment, specialized graphics processing capabilities are included in a high-performance personal computer or workstation, enabling the user to edit and manipulate an input video program and produce an output version of the program in a final format

[38] Office Action, page 5, line 14,
[39] Office Action, page 7, lines 1-4.

which may have a different frame rate, pixel dimensions or both."[40] Washino I further states "[t]he system . . . allows an operator to control equipment . . . at a centralized personal computer to produce, edit and record a video program. Each camera to be used with the system . . . feeds a signal to the personal computer . . ."[41] The Examiner argues that the *editing system* recited in the claims is "mere means for specifying a portion of the recorded digital moving picture to be reproduced, not for changing the format of the reproduced digital moving picture"[42] and further asserts that the combination of Bluth and Washino I "will provide means for format [sic] the video signal from the camera of Bluth into a digital format that can be read by a computer."[43] In response, Applicants indicate that the term *editing system* is not intended to have such a limited interpretation, and point to pages 11 and 12 of Applicants' specification for a discussion of *editing systems*. Further, it is to be noted that the claim language recites *enabling the individual to specify a sequence of segments of the sequence of digital still images stored on the digital, computer-readable and writable random-access medium*. In particular, note that *segments* is plural. A sequence of plural segments cannot mean merely specifying a portion of the digital moving picture to be reproduced.

The Office Action asserts that one of ordinary skill in the art would have combined the teachings of Bluth and Washino I "by using a processing means as taught by Washino for processing the motion picture from the camera into sequence of still mages that can be recorded and read on and from a computer random access medium thereby enhancing the function of the apparatus of Bluth to facilitate accessing and retrieving the stored digital motion picture when needed."[44] No citation to any evidence regarding the desirability or feasibility of such a combination is provided. The Office Action does not rebut this point, made in Applicants' January 30, 2006, response to a July 28, 2005 Final Office Action, other than to again recite an advantage recognized by the Examiner in hindsight, and unsupported by objective evidence, namely "enhancing the capacity of the system of Bluth and provid[ing] more advantage in accessing and retrieving the digital video signal."[45]

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[40] Washino I, col. 2, lines 45-51.

[41] Washino I, col. 3, lines 54-60.
[42] Action, page 7, lines 14-17.
[43] Action, page 7, line 18-20.
[44] Action, page 6, lines 15-19.
[45] Action, page 7, last two lines.

Regardless of the propriety of the proposed combination of Bluth and Washino I, neither Bluth nor Washino I teaches a *housing sized to be portable by an individual* that includes both a *motion video camera* and a *means that enables the individual to specify or define a sequence of segments of stored sequences of digital still images* as claimed in claims 1, 9 and 23. Bluth fails to teach the claimed portable housing, and thus fails to teach a portable housing that includes a camera and functions for enabling an individual to specify sequences of segments of stored video. In Washino I, any housing that contains a camera does not contain functions for enabling an individual to specify sequences of segments of stored video. In this light, the rejection of claims 1, 9 and 23 in view of Bluth and Washino I is traversed.

Rejection Under 35 U.S.C. §103 in view of Washino II and Scultheiss[46]

Claims 1, 9 and 23 were newly rejected under 35 U.S.C. §103 as being unpatentable over Washino II in view of Schultheiss. The rejection is respectfully traversed.

This rejection is improper and should be withdrawn because neither Washino II nor Schultheiss, nor their combined teachings, teaches or suggests the limitations of the independent claims. In particular, the Action asserts that all of the limitations of claims 1, 9 and 23 are disclosed by Washino II, except for "means for specifying a portion of the stored sequence still images to be reproduced [sic]."[47] However, the Examiner has previously acknowledged that "Washino [II] . . . fails to specifically teaches [sic] an editing means in the housing of the camera for specifying a sequence of the stored digital picture."[48] Furthermore, the limitations of claim 1, 9 and 23 are, again, not accurately reflected in this rejection of the Action.

According to Washino II, a camera includes a lens and viewfinder mounted on the body of a camera frame, and usual signal processing circuitry.[49] The video information may be compressed.[50] The video information may be stored on a hard disk drive 70.[51]

Schultheiss discloses a "spiral buffer for a non-linear editing system [that] digitizes and stores an input video signal as it is simultaneously being cataloged by an operator."[52]

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[46] Paragraph 5 of the Office Action purports to reject the claims over the combination of Washino II and Schulteiss, however at line 2 of page 9 the Action refers to "the apparatus of Bluth". Applicants interpret this as an error, wherein the Examiner intended to state Washino.
[47] Action, page 8, lines 16-17.
[48] Office Action of November 3, 2004, page 6, lines 3-4.
[49] Washino II, Fig. 1 and col. 3, lines 20-30.
[50] Washino II, col. 4, line 57 to col. 5, line 2.

The Action asserts that it would have been obvious to one or ordinary skill in the art to modify Washino II with Schultehiss by providing the apparatus of Washino II with control means as taught by Schultheiss to "enhance[e] the capacity of the apparatus of Washino [II] for providing more convenience to the user in viewing the portions has [sic] been captured."[53] This is yet another instance where an advantage unsupported by evidence is used as a basis for a rejection combination.

Regardless of the propriety of the proposed combination of Washino II and Schultheiss, neither reference teaches a *housing sized to be portable by an individual* that includes both a *motion video camera* and *editing means that enables the individual to specify or define a sequence of segments of stored sequences of digital still images* as claimed in claims 1, 9 and 23. In this light, the rejection of claims 1, 9 and 23 in view of Washino II and Schultheiss is traversed.

CONCLUSION

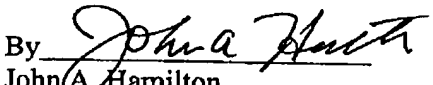
In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this reply, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an additional extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, please charge any fee to **Deposit Account No. 50-0876.**

Respectfully submitted,

Avid Technology, Inc.

September 5, 2006

By 
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[51] Washino II, Fig. 2 and col. 4, line 17.
[52] Schultehiss, Abstract
[53] Action, page 9, lines 4-6.

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